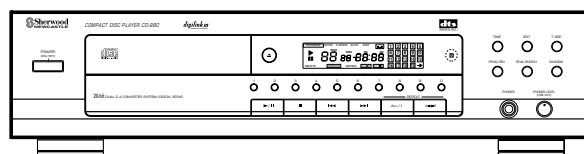


OPERATING INSTRUCTIONS



CD-980

Compact Disc Player

 **Sherwood**
NEWCASTLE



Unpacking and installation

Congratulations on your purchase!

Your new high fidelity Compact Disc Player is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your System and help ensure a trouble free installation.

Please unpack your System carefully. We recommend that you save the carton and packing material. They will be helpful if you ever need to move your unit and may be required if you ever need to return it for service. Your System is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your System for adequate ventilation and cabling convenience.

To avoid early damage, never place the System in direct sunlight, in excessively humid or dusty locations, in very low or high temperature (below 40°F ; 5°C or over 100°F ; 40°C) or near sources of strong magnetic fields. Connect your complementary components as illustrated in the following section.



CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN



CAUTION: TO REDUCE THE RISK
OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

**CLASS 1
LASER PRODUCT**

CAUTION

Invisible laser radiation when the unit is open. Do not stare into beam.

CAUTION:USE OF ANY CONTROLS, ADJUSTMENTS,OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Read this Before Operating Your Unit

FOR U.S.A. AND CANADA 120 V

FOR YOUR SAFETY

Units shipped to the U.S.A. and Canada are designed for operation on 120 V AC only.

Safety precaution with use of a polarized AC plug. However, some products may be supplied with a nonpolarized plug.

CAUTION : To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION : Pour éviter les choc électriques, introduire la lame la plus large de la borne correspondante de la prise et pousser jusqu'au fond.

FOR U.S.A.

■FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

CAUTION: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR AUSTRALIA AND EUROPE 230 V/240 V

FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240 V AC only.

To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth.

Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

PAN-EUROPEAN UNIFIED VOLTAGE

All units are suitable for use on supplies 230-240 V AC.

FOR OTHER COUNTRIES 110 V/220 V

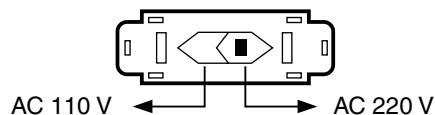
FOR YOUR SAFETY

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC VOLTAGE SELECTION

This unit operates on 110-220 V AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch

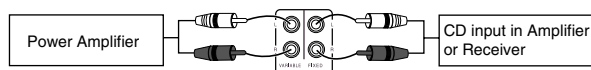


Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Rear Panel Connections

- Do not plug the AC input cord into the AC outlet when making connections.
- Be sure to connect the white plugs to the L(Left) and the red plugs to the R(Right) jacks when making connections.

■ OUTPUT

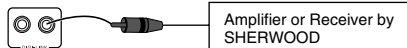


- When reducing signal path by connecting power amplifier to variable output of this unit directly, you can listen to high quality music.
It is possible to control volume with Headphone Level Control Knob.
- In general, fixed output is connected to CD input in amplifier or receiver.

■ AC INPUT CORD

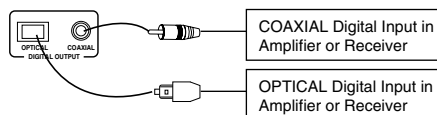
Plug this cord into a wall AC outlet.

■ DIGI LINK

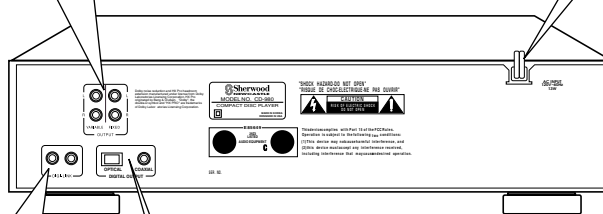


- Connect this jack to the DIGI LINK jack of Sherwood amplifier or receiver bearing the DIGI LINK III or II mark to control this unit remotely by DIGI LINK system.

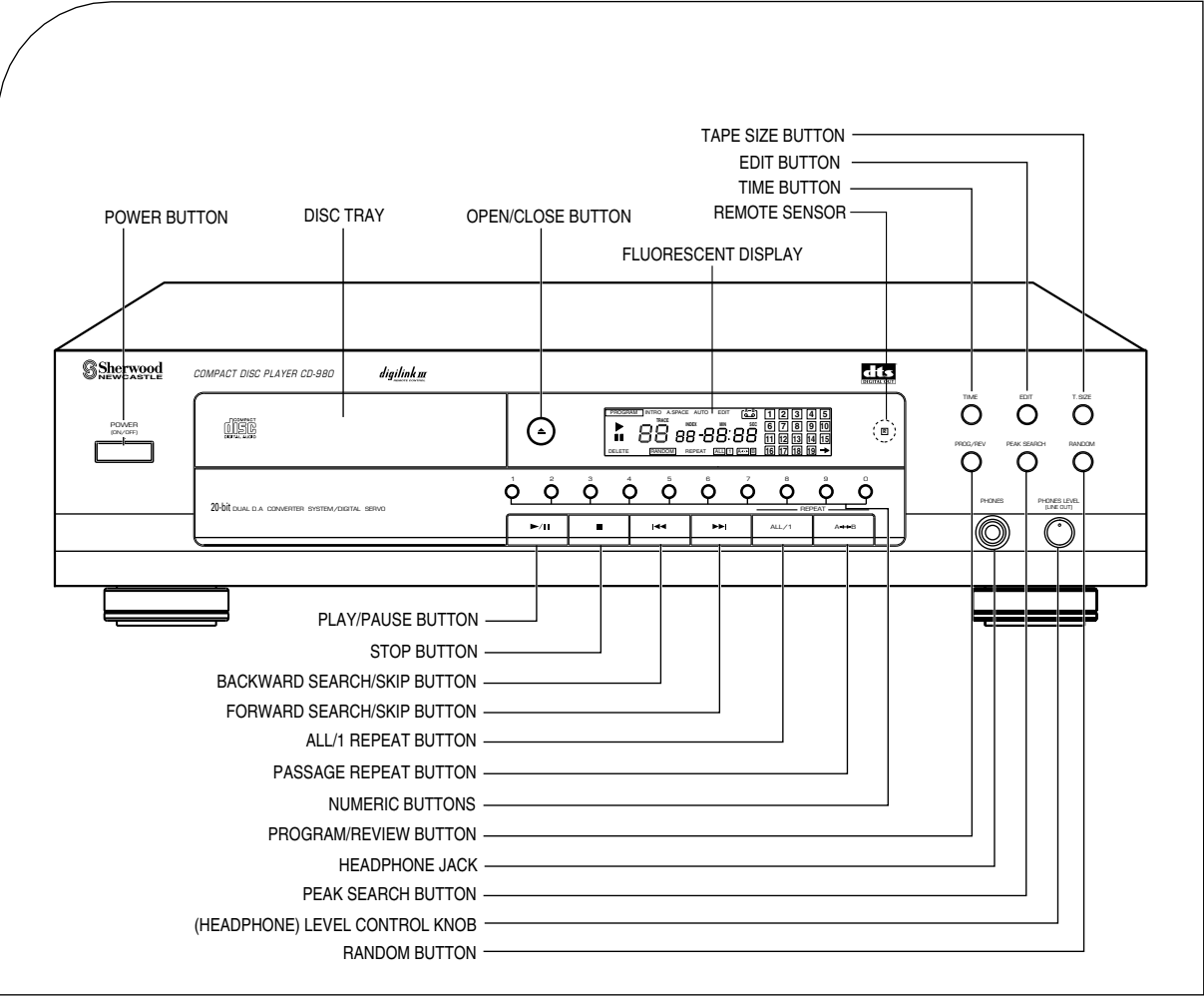
■ DIGITAL OUTPUT



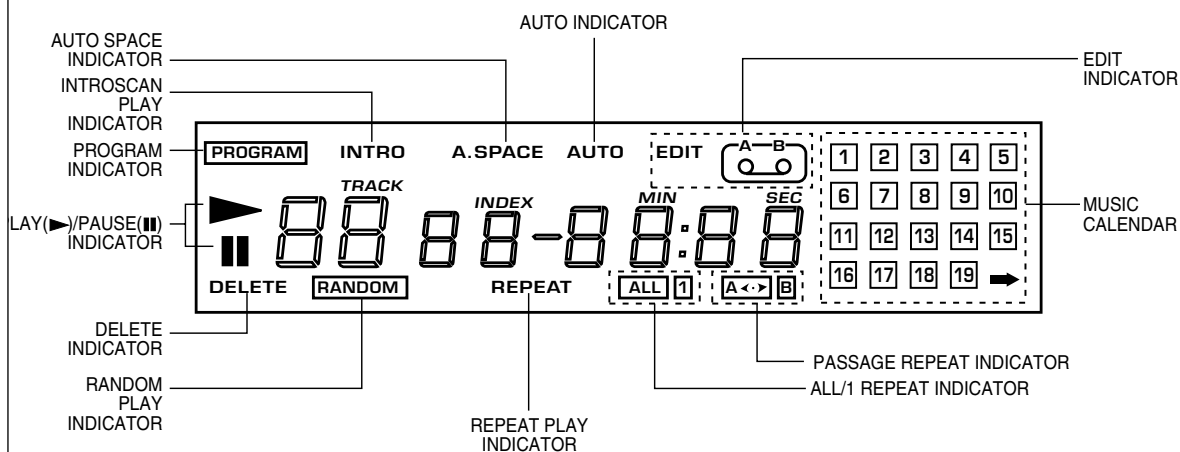
- Digital output should be connected to digital input of amplifier or receiver to enjoy live digital sound.
- You can record digital sound by connecting digital input of Mini Disc Recorder to these jacks.
- When making the COAXIAL DIGITAL connection, be sure to use 75Ω COAXIAL cord, not a conventional AUDIO cord.
- When making OPTICAL DIGITAL connection, do it after removing tap. Insert tap when not using the OPTICAL DIGITAL jack.



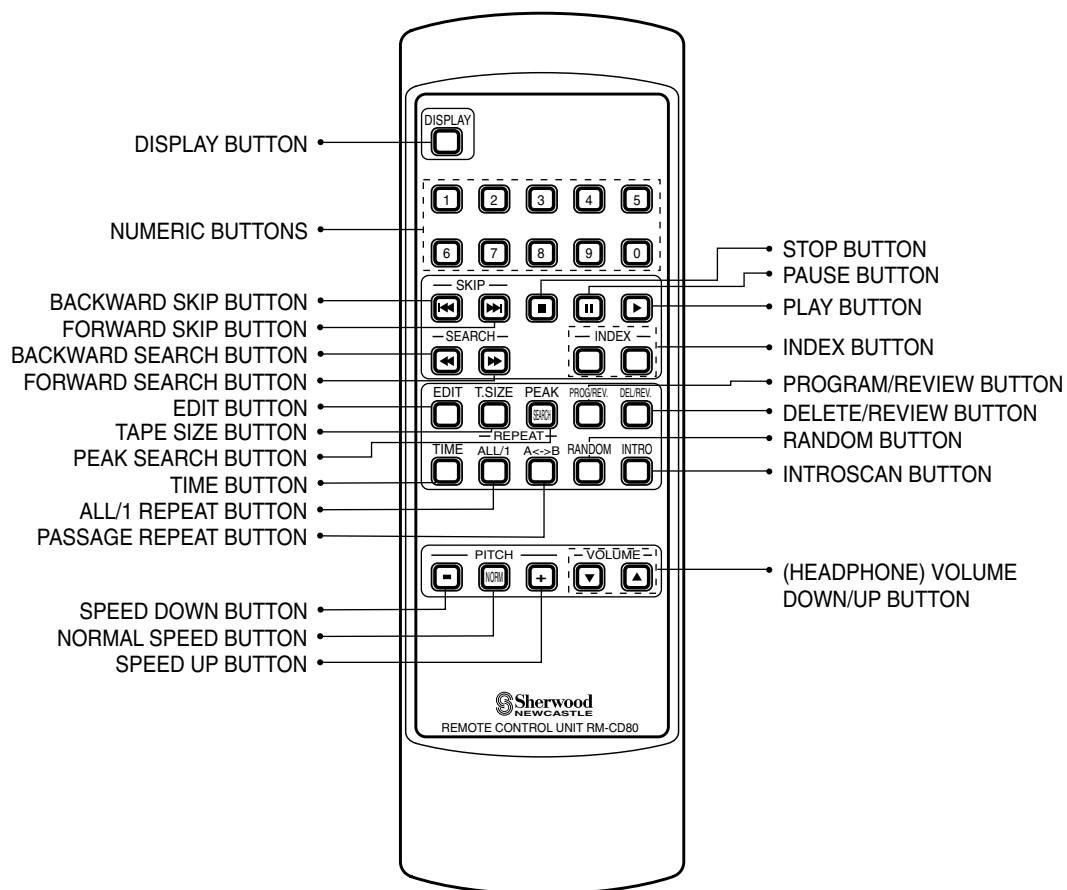
Front Panel Controls



■ FLUORESCENT DISPLAY

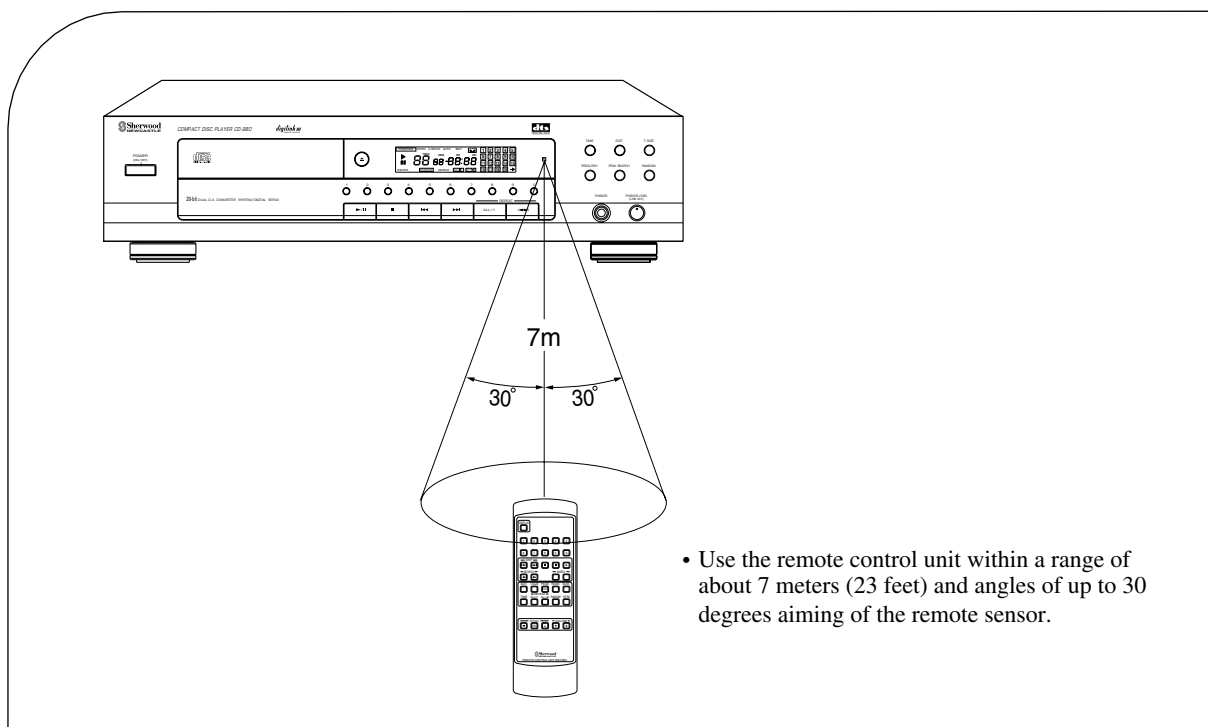


■ REMOTE CONTROL UNIT



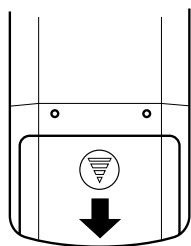
Note: The NORMAL SPEED BUTTON is not used for this unit.

■ REMOTE CONTROL OPERATION RANGE

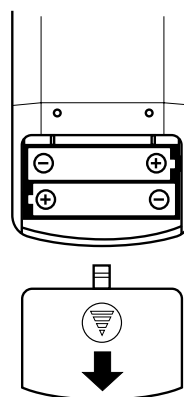


■ LOADING BATTERIES

1. Remove the cover.



2. Load two size “AAA” matching the polarity.



- Remove the batteries when they are not used for a long time.
- Do not use the rechargeable batteries (Ni-Cd type).

Before Operation

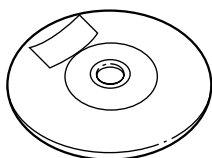
- Only compact discs bearing this mark can be reproduced.



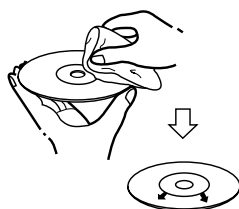
- In handling a disc, hold it carefully with edges.



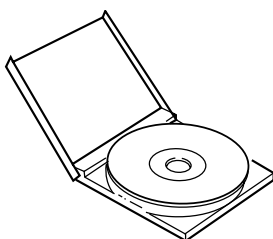
- Do not stick paper or write anything on the printed surface.



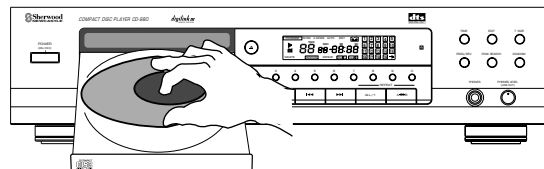
- Fingermarks and dust on the recorded surface should be carefully wiped off with a soft cloth. Wipe straight from the inside to the outside of the disc.



- Always keep the discs in their cases after use to protect them from dust and scratches.



- Do not expose discs to direct sunlight, high humidity or high temperature for a long time.
- When loading or unloading a disc in the disc tray, always place it with the printed side up.



- The DTS logo on the front means that the CD encoded with the DTS signal can be heard in DTS mode when this digital out is connected to the digital input of the amplifier with the DTS decoder, etc.

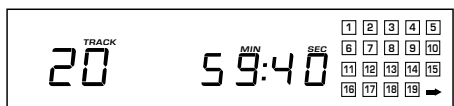


- “DTS” and DTS Digital Surround are trademarks of Digital Theater Systems, Inc.

PLAYING A DISC

1

Load a disc.



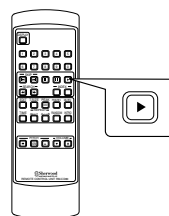
Stop mode

2

To start play.



or

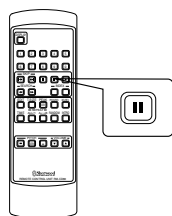


3

To interrupt play temporarily.



or



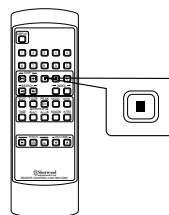
- Press again to restart play.

4

To stop play.



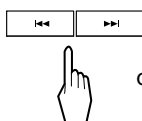
or



SEARCH AND SKIP PLAY

Searching for a passage during play

- Press and hold down the button until the desired passage is reached.

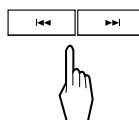


or

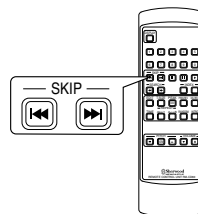


Selecting a track during play

- Press the button momentarily and repeatedly until the desired track is selected.



or

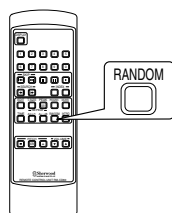


- You can select the desired track directly using the numeric buttons on the remote control unit or on the front panel.

PLAYING A DISC IN RANDOM SEQUENCE



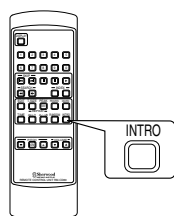
or



- The unit automatically selects and plays tracks on the current disc in random sequence.
- Press again to cancel random play.

PLAYING THE FIRST 10 SECONDS OF EACH TRACK

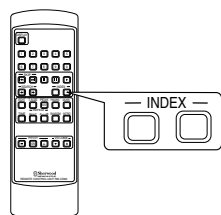
Introscan play



- The unit plays the first 10 seconds of each track.
- Press again to cancel the introscan play.

PLAYING THE DESIRED INDEX

- This function is available only on the CD in which tracks are divided into INDEXes.

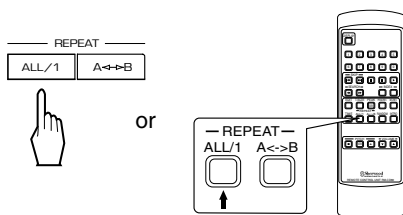


- When playing the track you want, select the desired INDEX.
- If you select the INDEX higher than the contained one, the unit will play the first INDEX.

REPEATING PLAY

Repeating a disc during play

- If this button is pressed once, all tracks are played repeatedly.

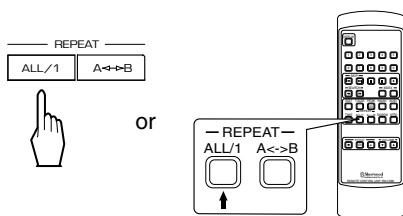


- Each time this button is pressed, the repeat mode changes as follows;

→ REPEAT ALL → REPEAT 1 → OFF

Repeating a single track during play

- If this button is pressed once more, current track is played repeatedly.

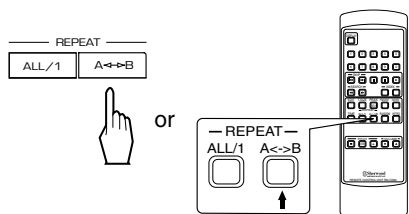


- Press again to cancel the repeat play.

Repeating a specific passage during play

1

At the beginning of the desired passage, press this button.



2

At the end of the desired passage, press again, then the desired passage is played repeatedly.

- Press again to cancel the repeat play.

PLAYING TRACKS IN ANY SEQUENCE

- Up to 20 selections can be programmed to play in any desired sequence.

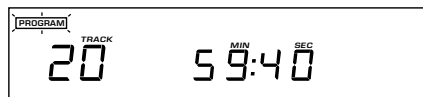
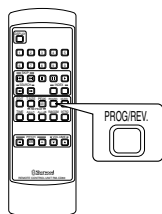
Programming the tracks on a CD

1

In the stop mode.



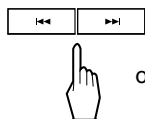
or



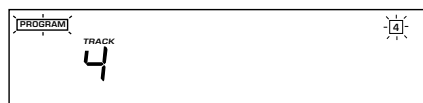
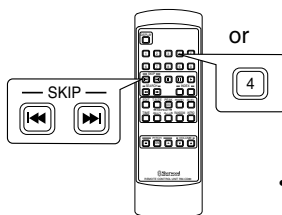
2

Select the desired track.

Example: When selection track 4.



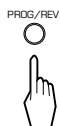
or



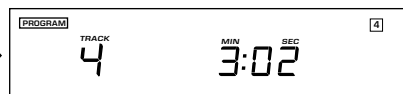
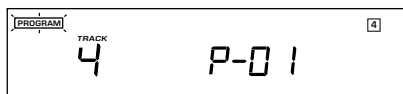
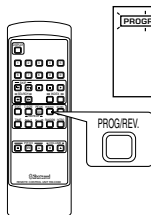
- You can select the desired track directly using the NUMERIC buttons in the front panel.

3

Store the selected track in the memory.



or



- When selecting a track with the NUMERIC buttons, the selected track is stored automatically without the PROGRAM/REVIEW button.

4

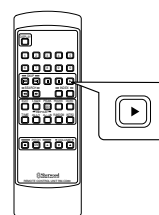
Repeat steps 2 and 3 until the desired program is completed.

5

Start play.

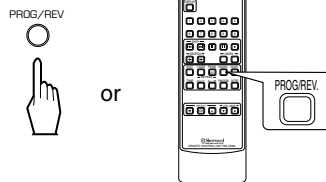


or



Checking the programmed selections

- Each time the PROGRAM/REVIEW button is pressed in the stop mode, the programmed selections will appear in the programmed sequence.

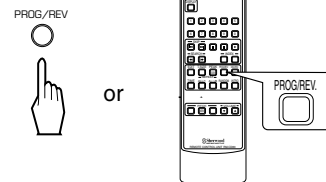


Rectifying any wrong programmed selection

1

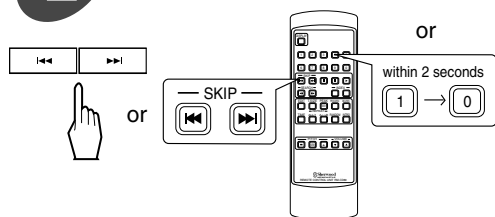
Find track 9.

Example: When track 5, 9 and 7 are programmed, and you want to replace track 9 with track 10.



2

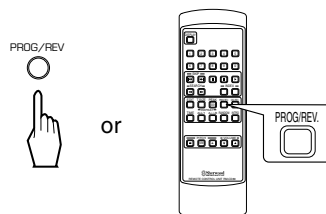
Select track 10.



- You can select the desired track directly using the NUMERIC buttons in the front panel.

3

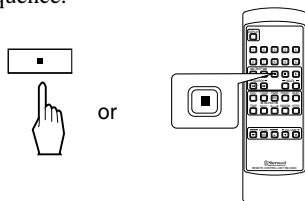
Store the desired track in the memory.



Clearing the programmed selections

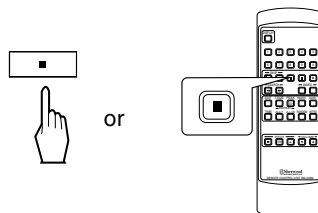
■ To clear one by one

- Each time this button is pressed, the programmed selections are cleared one by one in the opposite sequence.



■ To clear all programmed selections.

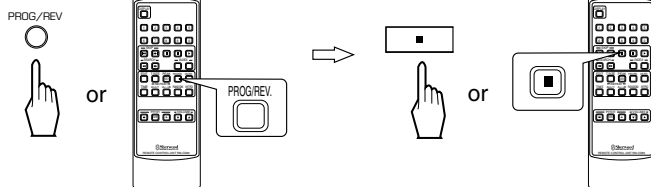
- Press this button for more than 4 seconds.



- Or press OPEN/CLOSE button (▲).

■ To clear a specific selection.

- Find the desired selection and clear it.



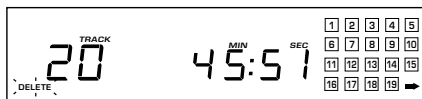
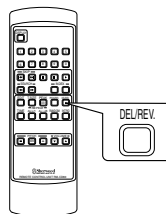
DELETING UNDESIED TRACKS

- When there are undesired tracks, you can delete.
- Up to 20 tracks can be deleted.

To delete

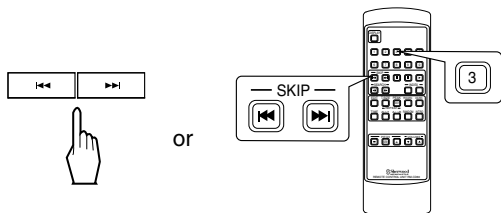
1

In the stop mode.



2

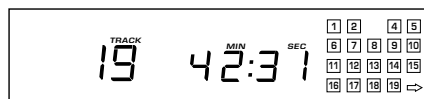
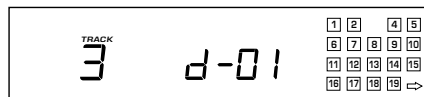
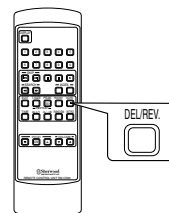
Select undesired tracks.
Example: When deleting the 3rd track.



- You can select the desired track directly using the NUMERIC buttons in the front panel.
- When selecting a track with the NUMERIC buttons, the selected track is stored automatically without the PROGRAM/REVIEW button.

3

Delete the selected track.



4

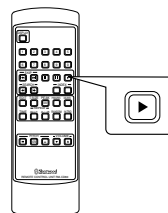
Repeat the step 2 and 3 to delete the undesired tracks.

5

Start play.

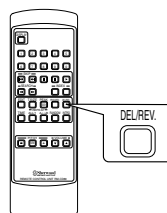


or



Checking the deleted selections

- Each time the DELETE/REVIEW button is pressed, the deleted selections will appear in the deleted sequence.



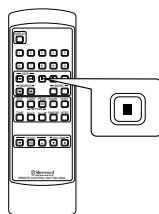
Recovering the deleted selections

■ When recovering one by one.

- Each time this button is pressed in the delete mode, the deleted selections are recovered one by one in the opposite sequence.



or

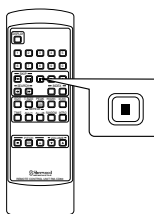


■ When recovering all deleted tracks.

- Press and hold down this button for more than 4 seconds.



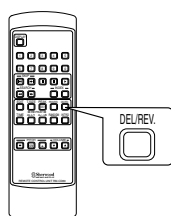
or



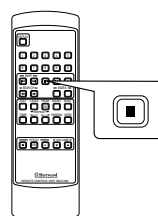
- Or press OPEN/CLOSE button.

■ When recovering a specific selection.

- Find the desired selection and recover it.



or



EDITING FOR RECORDING

- Up to 20 tracks for auto and manual edit can be edited according to the tape length.

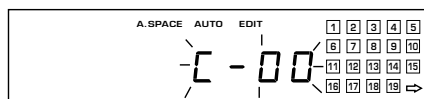
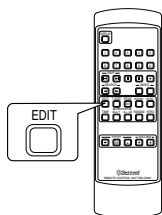
Making auto edit

1

In the stop mode, select the auto edit mode.



or



- Each time this button is pressed, the edit mode changes as follows;

AUTO EDIT → MANUAL EDIT → OFF

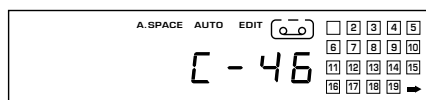
2

Select the desired tape length.

Example: When the tape length is 46 minutes.



or



- Each time this button is pressed, the tape length changes as follows;

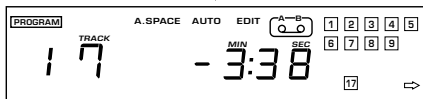
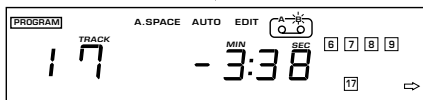
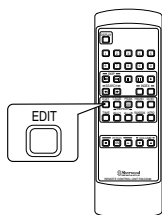
C-46 → C-54 → C-60 → C-74 → C-90 → C-120

3

Edit the tracks to be recorded.



or



The edited tracks on the side A.

The edited tracks on the side B.

The auto edit is completed.

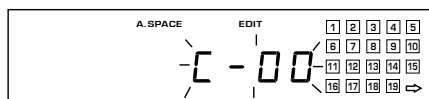
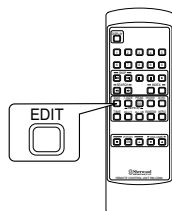
Making manual edit

1

In the stop mode, select the manual edit mode.



or

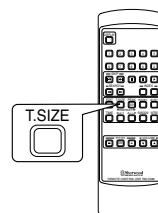


2

Select the tape length.

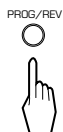


or

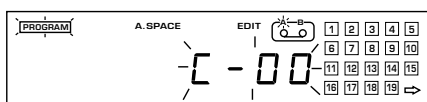
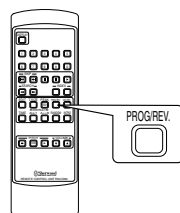


3

Press the PROGRAM/REVIEW button to manually edit the tracks to be recorded.



or



4

Edit the tracks for the side A repeating steps 2 and 3 of programming procedure on page 13.

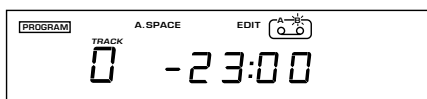
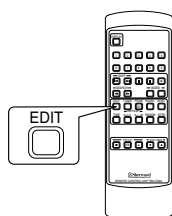
- During manual edit, if the “-” indicator in the time display disappears and arrow mark blinks, it means that the total time of the edited tracks exceeds the tape length.

5

Press the EDIT button to start editing for the side B.



or

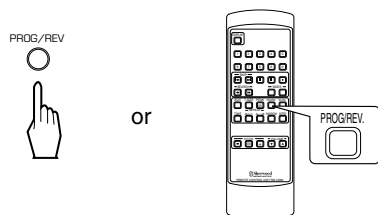


6

Edit the tracks for the side B in the same manner.

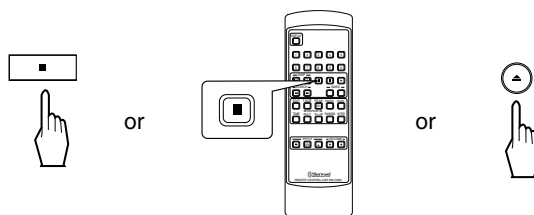
Checking the edited tracks

- Check as you do the programmed tracks.



Clearing all edited tracks

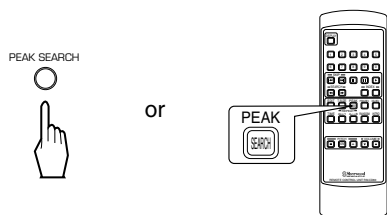
- Press the STOP/CLEAR button for more than 4 seconds or open the tray.



- In the manual edit mode, you can clear or rectify the tracks like programming.

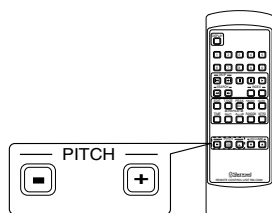
SEARCHING FOR A PEAK LEVEL

- In the stop mode.



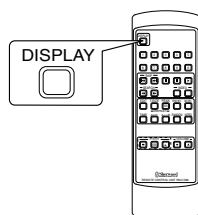
- It will play the peak level passage repeatedly for 5 seconds.
- Press “■” button to cancel.
- If you do this again and again, the peak level passage may be changeable on the same CD.

SETTING A DESIRED PITCH CONTROL



- When connecting amp or receiver to digital output and using “PITCH CONTROL” function, noise or abnormal sound can be heard.
In this case, don’t use “PITCH CONTROL” function.
- Each time PITCH + or - button is pressed, +13, -18 speeds are selected step by step.
- NORMAL SPEED BUTTON does not operate.

SELECTING A BRIGHTNESS OF THE DISPLAY

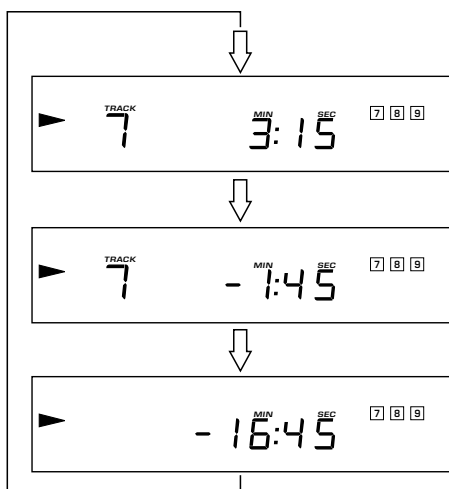
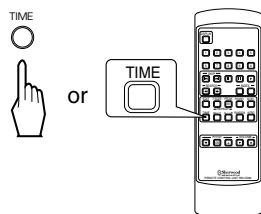


- Each time this button is pressed, the brightness of the display changes as follows;

→ ON → DIM → OFF →

SELECTING A TIME DISPLAY

- Each time this button is pressed during play, time display changes as follows;



Elapsed playing time of the current track.

Remaining playing time of the current track.

Remaining playing time of the disc.

- During random play, the remaining playing time of the disc shows “--:--”.

USING THE HEADPHONES

1

For private listening, insert a 1/4 inch plug of the headphone into the PHONES jack.



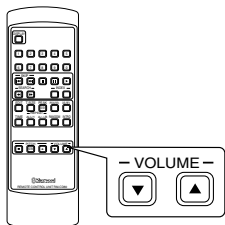
2

Adjust the PHONES LEVEL.

PHONES LEVEL
(LINE OUT)



or



- When connecting this unit to power amp directly using variable output, you can control the volume with this.

Troubleshooting Guide

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or our service organization.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	<ul style="list-style-type: none"> • The AC input cord is disconnected. • The POWER button is not pressed correctly. 	<ul style="list-style-type: none"> • Connect the cord securely. • Press the POWER button to ON.
No play	<ul style="list-style-type: none"> • The disc is loaded upside down. • Dirty disc. • Defective or deeply scratched disc. 	<ul style="list-style-type: none"> • Reload the disc with the printed side up. • Clean the disc. • Load another disc.
No sound	<ul style="list-style-type: none"> • Incorrect connections. • Incorrect operation of the amplifier. • The "■" indicator lights up. 	<ul style="list-style-type: none"> • Make connections correctly. • Operate the amplifier correctly. • Press the ►/■ button to cancel the pause mode.
Poor or distorted sound	<ul style="list-style-type: none"> • The unit is connected to the PHONO input jacks of the amplifier. • Poor connections. 	<ul style="list-style-type: none"> • Make connections correctly. • Check the connections and connect all cords securely.
Sound skips	<ul style="list-style-type: none"> • Defective or deeply scratched disc. • This unit is placed on a surface that is subject to vibration or physical shock. 	<ul style="list-style-type: none"> • Play another disc. • Place this unit on a stable surface.
Programming or deleting does not perform.	<ul style="list-style-type: none"> • The disc is dirty or badly scratched. • The programming or deleting procedure is not correct. • The number of the programmed or deleted selections is 20. 	<ul style="list-style-type: none"> • Try again with a scratch-free disc. • Try again. • Check the number of the programmed deleted selections.

Specifications

■ **SYSTEM** Compact Disc Digital Audio

■ **TYPICAL AUDIO PERFORMANCES**

Number of Channels 2
 Frequency Range 20-20,000 Hz 0.5 dB
 Signal To Noise Ratio (A Wtd.) More than 110 dB
 Dynamic Range More than 93 dB
 Total Harmonic Distortion Less than 0.001 % at 1 kHz
 Wow and Flutter Quartz crystal precision
 Audio Output Level 2 V RMS
 Digital Output
 Coaxial 0.5 V_{p-p}/75 Ω
 Optical (Wavelength 660 nm) -15 ~ -20 dBm

■ **OPTICAL READOUT SYSTEM**

LASER Semiconductor AlGaAs
 Wavelength 760-800 nm
 Numerical Aperture 0.45

■ **SIGNAL FORMAT**

Sampling Frequency 44.1 kHz
 D/A Conversion Twin 20 bit D/A Conversion
 Oversampling 8 times

■ **GENERAL**

Power Requirement
 U.S.A and Canada 120 V, 60 Hz
 Power Consumption 13 W
 Dimension (W × H × D) 440 × 95 × 245 mm
 (17-5/16 × 3-3/4 × 9-5/8 inches)
 Weight(NET) 5.5 kg (12.1 lbs)

Note: Specifications and design subject to change without notice for improvements.

